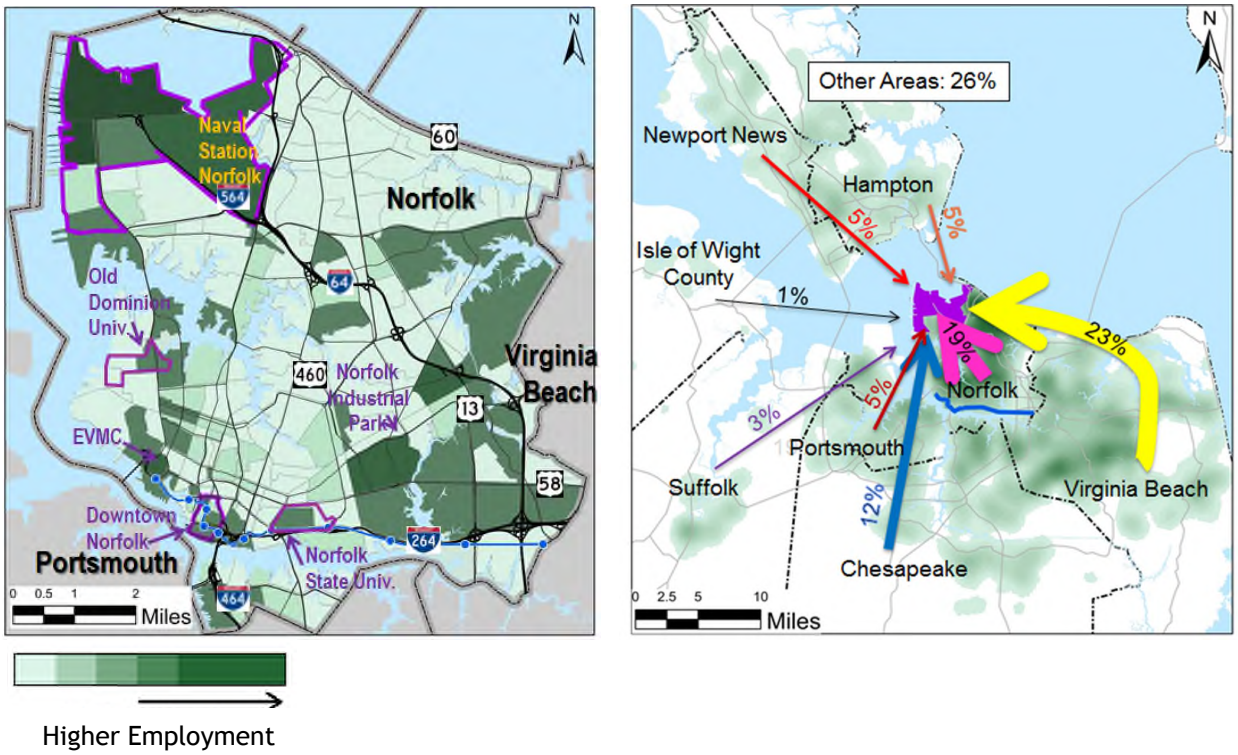
Norfolk Naval Station Transit Extension Study

Overview for Norfolk City Council

May 19, 2015

Norfolk Naval Base



- Norfolk Naval Station Norfolk is region's largest employer
- Approximately 60-70,000 jobs
- Draws employees from all across the region

Initial Corridor Planning

- Study defined the **“Purpose and Need”** and **“Reasonable Alternatives”** for a transit extension to the Naval Station
- Designed to help set the context for the more detailed, formal Environmental Impact Statement to follow

Public/Stakeholder Meetings

- 11 Public Workshops
  - More than 500 participants
- 8 City of Norfolk Task Force Meetings
- 5 US Navy Meetings
- 12 Stakeholder Meetings
  - Regional officials from Health Care, Housing, Business, Environment, Higher Education and Tourism

Public Developed Purpose And Need

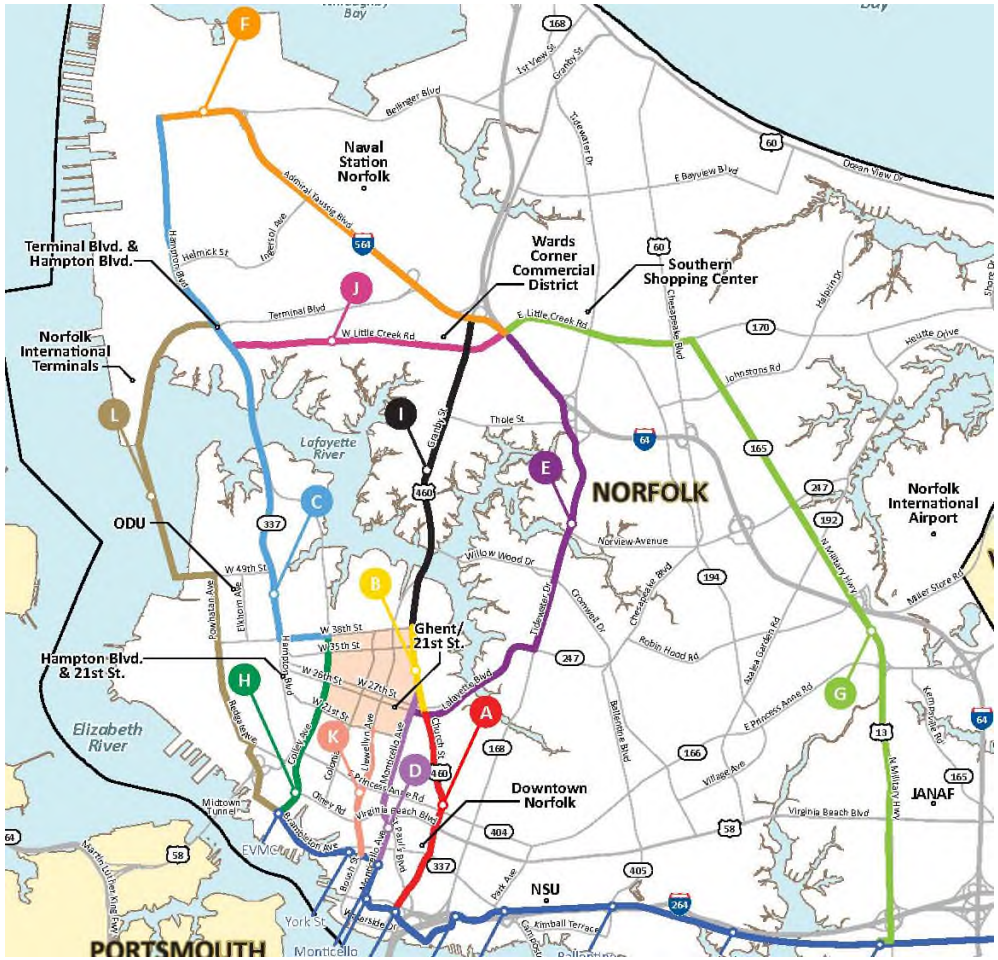
To provide improved transit service, possibly in the form of a light rail extension, from The Tide light rail system to, and possibly onto, Naval Station Norfolk in order to:

1. **Develop Transit Connections to Many Points Within Norfolk**
2. **Address Heavy Traffic and Congestion**
3. Reduce Travel Time
4. Increase Park and Ride Locations
5. Provide Better Interconnectivity of Transit Modes
6. **Consider for Future Light Rail System Expansion**

Public Identified Key Connection Points and Potential Corridors

- Top activity centers
  - ODU
  - Norfolk Int'l Airport
  - Ghent/21st Street
  - Wards Corner
  - Military Circle/JANAF

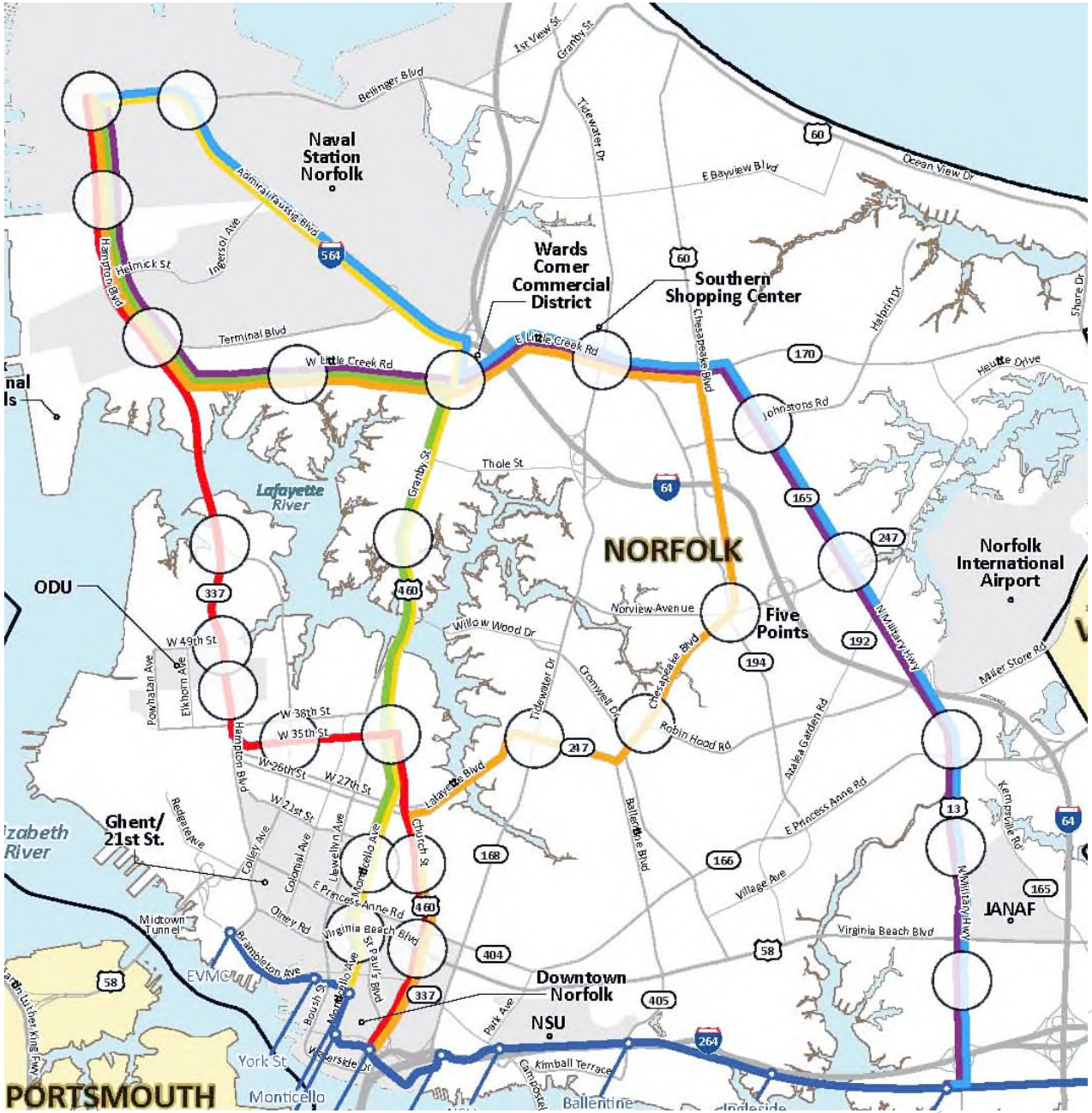
Initial Refined Segments



LEGEND

- City Boundary
- Tide Light Rail
- Tide Light Rail Stations
- Segment A
- Segment B
- Segment C
- Segment D
- Segment E
- Segment F
- Segment G
- Segment H
- Segment I
- Segment J
- Segment K
- Segment L
- Segment Option Area, Multiple Routes Under Consideration

Conceptual Corridors with Stations for Further Study



Partial Summary of Technical Analysis

Project Themes	Connect to Many Points within Norfolk	Provide an Alternative to Heavy Traffic and Congestion			Interconnectivity of Transit Modes			Others (Economic Development and Neighborhood Revitalization)		
Evaluation Criteria	Number of Activity Centers within 1/2 mile of Stations	Number of Riders Served along the alignment	Total Pop. reached within 1/2 mile of Stations	Total Empl. reached within 1/2 mile of Stations	Number of Transit Stops within 1/2-mile of Stations	Sidewalks within $^1/_2$ mile of Stations (feet)	Streets <25MPH posted speed within $^1/_2$ mile of Stations (feet)	Zero Car House-holds within 1/2 mile of Stations	Acres of Potential TOD within 1/2 Mile of Stations (1+ Acre Parcels)	Future Jobs within 1/2 Mile of Align. Stations (2034 Jobs)
Western	**11**	4,000	26,530	25,580	166	474,000	460,000	1,700	66	25,250
Central A	**8**	2,500	13,770	24,930	119	259,000	257,000	1,030	81	20,130
Central B	**11**	4,500	21,460	32,810	159	371,000	418,000	1,250	86	26,100
Central C	**10**	4,500	31,520	24,150	220	542,000	545,000	1,980	117	23,890
Eastern A	**3**	3,000	11,940	13,880	67	172,000	202,000	480	130	13,660
Eastern B	**5**	5,000	19,630	21,770	107	284,000	363,000	690	136	19,640

Public Preferences – 2 Viable Corridors

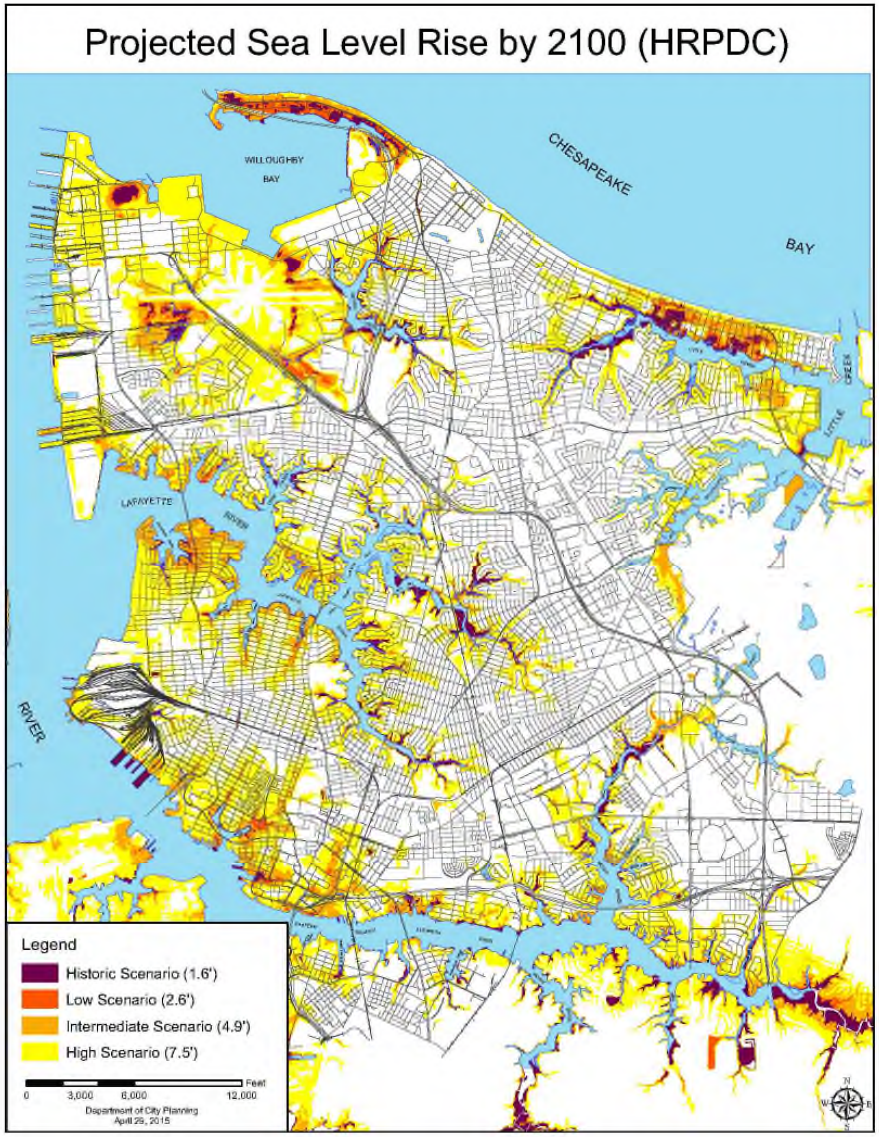
- Western Corridor
  - Most preferred route
  - Route past Ghent, ODU and Hampton Blvd was top choice
- Eastern Corridor
  - 2nd most preferred corridor
  - Route on Military Hwy and Little Creek Blvd was top choice

Western Corridor Strengths

- Transit-oriented mix of land uses
- Many transit-oriented activity areas, including ODU
- Large numbers of residents, students, and jobs
- Good sidewalk network
- Potential for economic development

Eastern Corridor Strengths

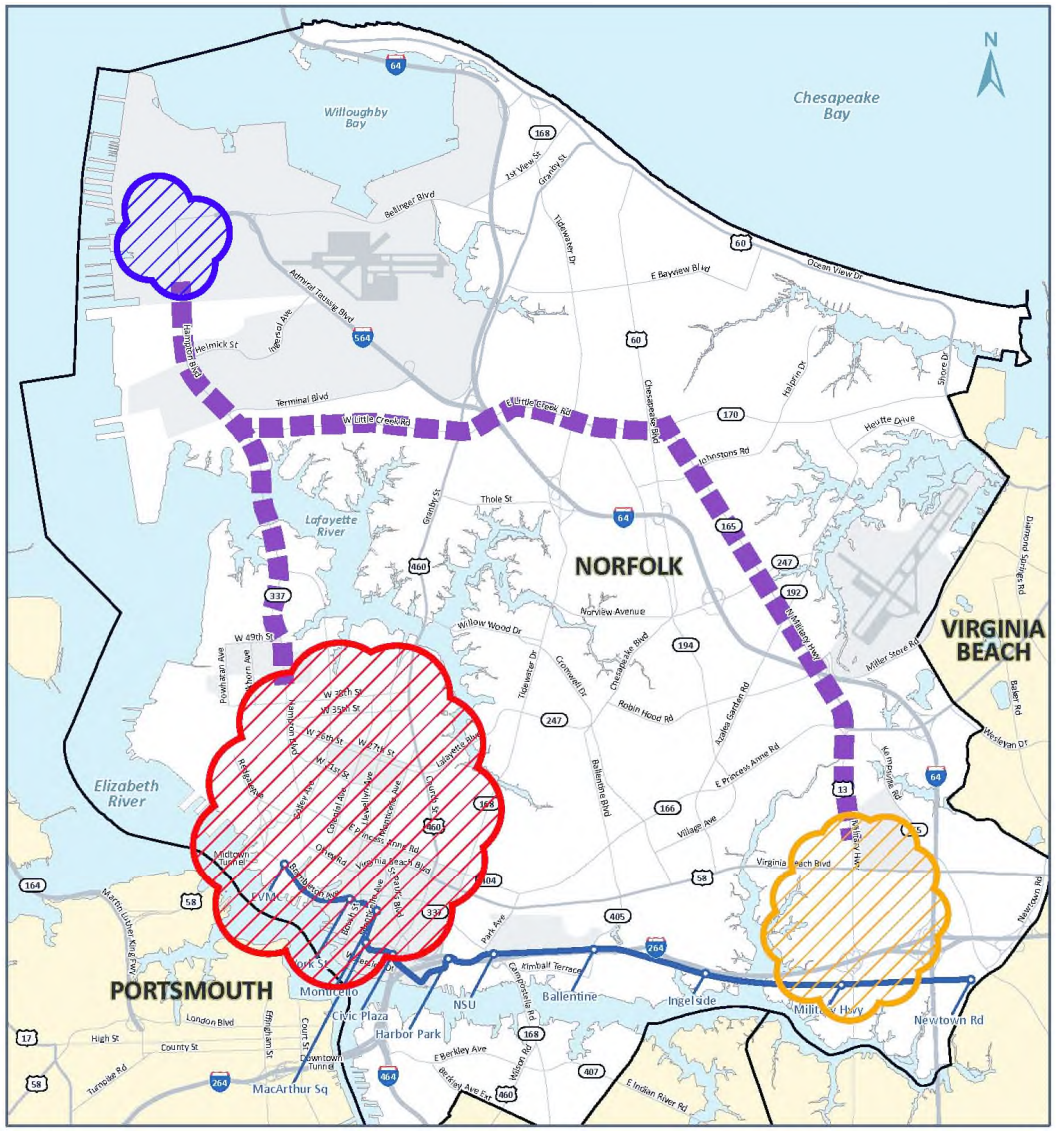
- Large population with a 5-minute drive of stations
- Best opportunity for transit-oriented development
- Minimal ROW and parcel impacts
- Highest potential for ridership
- Regional and system connectivity
- Fewer environmental impacts
- Greatest resiliency from flooding



RC100 – "Corridor of Opportunity"

- New *Vision 2100* strategy recently initiated
- Goal of concentrating development and growth in the more resilient areas of the City
- Major transit investment in Military Highway/Little Creek Road corridors would be uniquely positioned to support this effort

DEIS Study Recommendation



Combination of both east and west corridors, technologies and phasings supported for more detailed analysis:

- Connection to Norfolk Naval Station via the east side of the city (connections to the existing TIDE alignment and circulator opportunities with the gates of the Naval Base yet to be determined)
- Analysis of high capacity transit connector/circulator on the west side of Norfolk

Light Rail Transit

Pros

- Travel time reliability with dedicated right-of-way
- Improved mobility options
- Opportunities for transit-oriented development

Cons

- Higher capital costs than bus rapid transit or streetcar
- Requires more infrastructure than bus rapid transit

Bus Rapid Transit

Pros

- Lower capital costs per mile than LRT
- May have faster timeline for project construction and operation

Cons

- Perceived public opinion that BRT operates similar to fixed route buses
- Often has lower ridership when compared with light rail transit

Streetcar

Pros

- More passenger capacity standard buses
- Similar economic development opportunities to LRT
- Can operate in tightly constrained urban settings better than LRT

Cons

- Mixed traffic scenario and lower operating speeds can slow travel times
- Not practical as commuter option for longer travel corridors

Next Steps

Federal Draft Environmental Impact Study (DIES) and Early Design

- Draft Environmental Impact Statement projected to begin by Fall 2015
- Supported by $7M+ State Grant (4% local match)
- 30-36 Months to complete
- Will facilitate selection of a “Locally Preferred Alternative” to carry into Final Environmental and Engineering